To: Clarke, William[clarke.william@epa.gov]; DeFigueiredo,

Mark[DeFigueiredo.Mark@epa.gov]; Cook, BrianB[Cook.BrianB@epa.gov]

Cc: Eisele, Adam[Eisele.Adam@epa.gov]

From: Beeler, Cindy

Sent: Wed 8/24/2016 6:39:07 PM

Subject: RE: Subpart W - FLIGHT Data Download

Yes, Mark - thank you. We'll share our comparative analysis findings with you comparing Uinta Basin emission inventory vs. GHGRP-W.

Cindy Beeler

US EPA Region 8, Energy Advisor Office of the Regional Administrator

Tel: 303-312-6204 Beeler.Cindy@epa.gov

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From: Clarke, William

Sent: Wednesday, August 24, 2016 12:38 PM

To: DeFigueiredo, Mark < DeFigueiredo. Mark@epa.gov>; Cook, BrianB < Cook. BrianB@epa.gov>

Cc: Beeler, Cindy <Beeler.Cindy@epa.gov>; Eisele, Adam <Eisele.Adam@epa.gov>

Subject: RE: Subpart W - FLIGHT Data Download

Mark,

Thank you! I will review and update my GHG document accordingly.

Have a great day,

Bill

From: DeFigueiredo, Mark

Sent: Monday, August 22, 2016 11:18 AM

To: Clarke, William <<u>clarke.william@epa.gov</u>>; Cook, BrianB <<u>Cook.BrianB@epa.gov</u>> **Cc:** Beeler, Cindy <<u>Beeler.Cindy@epa.gov</u>>; Eisele, Adam <<u>Eisele.Adam@epa.gov</u>>

Subject: RE: Subpart W - FLIGHT Data Download

<< File: Response to Region 8 Questions.docx >>

Hi Bill,

Here are the responses to your Subpart W questions. Sorry for the delay.

Best wishes, Mark

-

Mark de Figueiredo, J.D., Ph.D. Climate Change Division U.S. Environmental Protection Agency

Office: (202) 343-9928 Mobile: (202) 251-4951

Email: defigueiredo.mark@epa.gov

From: Clarke, William

Sent: Monday, August 08, 2016 3:50 PM

To: DeFigueiredo, Mark < DeFigueiredo. Mark@epa.gov >; Cook, BrianB < Cook. BrianB@epa.gov >

Cc: Beeler, Cindy < Beeler.Cindy@epa.gov>

Subject: RE: Subpart W - FLIGHT Data Download

Hello guys!

As promised, I have been pulling data using Envirofacts and have been developing questions along the way.

- 1) What does "Employs technologies to directly monitor some or all GHG emissions" mean? Would this data be available to look at?
- Does GHG include the speciation of gas? Annual averages or constant monitoring is required in some parts of subpart W paragraph (U) but I could not find any of that information in Envirofacts.
- 3) How should I go about determining the count of Well Completion and Work overs (hopefully separately) from Envirofacts? FLIGHT gives a summary but the Well Completion and Work overs in Envirofacts gives how much emissions were created, not the actual amount of completions/workovers done.
- 4) Does Envirofacts have VOC, NOX or any other emissions recorded? (I don't think so but have to ask!)
- 5) What search would net the Total Barrels of Oil per facility? This is to compare produced Oil w/ CH/4 emissions.
- 6) Envirofacts used count for several inventories such as pneumatic controllers, is count used as the Sum of controllers or used as the Count? (I am a little confused myself but our Utah Inventory uses Count and Sum as different terms and I need to compare the two).

- 7) Does any of the Envirofacts data have the API or FIP # associated with the wells and data so I can link by that unique number?
- 8) By chance does any of the data have produced water totals?
- 9) Can the breakdown of tanks go further by type?: Oil tanks, Water Tanks, Condensate Tanks.

I think that covers everything from the last 3 weeks of working with Envirofacts. I really appreciate your time looking into this so I can provide a nice summary and comparison of Subpart W. If there are any other sources of data for Subpart W that you can share I would be eternally grateful.

Finally I wanted to make aware that some searches prompt a HTTP 404 Web Page Not Found OR a 401 Web Page Found - Password Needed page. Usually I try and export the data to a CSV a few times and it eventually works but currently I cannot get some files open such as Unique Flares.

Thank you,

Bill Clarke

US EPA Region 8, Energy Advisor Intern Office of the Regional Administrator Tel: 303-312-6200

Clarke.William@epa.gov

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From: Beeler, Cindy

Sent: Tuesday, July 19, 2016 5:30 PM

To: DeFigueiredo, Mark < DeFigueiredo. Mark@epa.gov >; Cook, BrianB < Cook. BrianB@epa.gov >; Clarke,

William <clarke.william@epa.gov>

Subject: RE: Subpart W - FLIGHT Data Download

Brian and Mark -

Thanks you very much for the personalized attention you provided Region 8 today - very helpful! We'll keep you posted on our analysis.

Cindy Beeler

US EPA Region 8, Energy Advisor Office of the Regional Administrator

Tel: 303-312-6204 Beeler.Cindy@epa.gov CONFIDENTIALITY NOTICE: This e-mail, including all attachments, is for the sole use of the intended recipients and may contain Confidential and privileged information. Any unauthorized use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of this message.

From: DeFigueiredo, Mark

Comba Translate Index 10, 2016 1

Sent: Tuesday, July 19, 2016 1:10 PM

To: Beeler, Cindy <Beeler.Cindy@epa.gov>; Cook, BrianB <Cook.BrianB@epa.gov>; Clarke, William

<<u>clarke.william@epa.gov</u>>

Subject: RE: Subpart W - FLIGHT Data Download

We can plan to use the following webinar link this afternoon in case it's useful to walk through GHGRP data access options real time.

https://epawebconferencing.acms.com/ghgrp

----Original Appointment-----

From: Beeler, Cindy

Sent: Thursday, July 14, 2016 6:19 PM

To: Beeler, Cindy; DeFigueiredo, Mark; Cook, BrianB; Clarke, William

Subject: Subpart W - FLIGHT Data Download

When: Tuesday, July 19, 2016 3:00 PM-3:30 PM (UTC-07:00) Mountain Time (US & Canada).

Where: 866-299-9141 ...878-159-02#

Our summer intern, Bill Clarke, is doing some comparative analysis for us wrt Subpart W versus Emission Inventory data supplied by operators. We'd also like to understand how the reported methane numbers compare across basins within our region and across operators here. Bill has spent time on the FLIGHT site but has not been able to see how to download detailed data.